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TCATGTTTCA CGGAACGACG AATTTATCCC GTCGTTTCTT CCTTTCCGTT TTAACTCATA TCTCTTCCTG GATCCTTCAG AGCTCTTGTC AATTCCTCAC GTTTTTTTTT GTTTTTTCGT CGTTTAATTG TGGAAACACA TATCCGTCCT CTTTGAAACA GCATCAGAAA ACTTTCTGCT CTCCGTGTCC TTCTACTTAC TCTGATTGCC TTAGTTAGTC ACATCGCAAG CAACAACTAA CTGCCAATGG GAGGAGCCAG TTGGAGCAGG GTGCGTGCTC GGTGCTCTTT TCAGAAGGTT TTCTCTTGTG CCAGCATGCT TTTTTGAGGC TGTGTCATCA CAATGAACAT GTGTGAGTTC ATCCGTCTGG ATTATTCTTT TTCTTACGTC TTCTGAGTAC TTCATACTTT CCAAATTTTT CAACTGAACT TTTCTTCTTT TCTCATTGAA GTGGTTTGGT TTTGGTCGCG TGATCAACGG ATCCTACTT TTTGAAACAA AATGTTTTTG AAGTTTCACA GACTGATTTC GGGGTTTTTT CAAAGAATAT ATTCCCTCTC GAGCAAGAGA AAATTCCAGA AAATAGTAGT TTTTTTCAAT TAGTCGTTTC ATTTGTACTA GCTAAAAAAC TTGCAACTTA TGGCTTTAAA ACATGTGTTG GCTTCATACA AAAACATTTA ACTAGTGTTT TTCCAGTTTT GTGTTCGTTT CATTTTCTCA CCAAACTGAC AATAATTACT TTCTGTGAAC GTGTTTTGTA GGCAAGCTCC CGAATATTTT ATCAATTTGA TTGCGATAAT TATTCTATCA GAAATATATT TTCAGAAATC CAAATACTCC AGGTGCCAAT GCGGTGAAAG AAAATTATGA AGTTTATTCC TGAAATCACA CTACTCTTGC TTTTATTTGT ACACTCTACA CAGGTTAGTT GGTTGATTCT AGATCTCTTG CCTCCTAGCT TGCAAGGATA ATATAATTGA ATTGTTTTTG AGGAGTGCAA AGATTGAATA GTTTTCTATA TTTAGGCTAA AGGAAAACGA CGGAAATGTC CGGAGGGTGC GTGGTCGGAA GGAAAGATTA

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		2/23			
1150 TGAACACGAT			1180 TGTTGCCCGA		1200 AGCGTACAAG
1210 TTAATATTGA	1220 GATTCATGTA		1240 GACTCTATAA		1260 ATATGTGAAA
1270 GTTTTCTTTA			1300 ACTTTTGAAT		1320 GATAGAAATT
	1340 TTCGATTCAA		1360 CTTCAAAGCG		1380 ACTCACTTCC
1390 ATTTATCTCT			1420 AAGCCTTTTT		1440 CGTTCTTTT
	1460 TTCTTACAAA		1480 TCCTTGATGA		1500 CTGAGAATAG
1510	1520	1530	1540 AGTTTTGTGC	1550	1560
1570	1580	1590	1600	1610	1620
1630	1640	1650	ACACAGAAGA 1660	1670	1680
GACTGCCAAA 1690	AGTCGAAGGG 1700		TTTGTTGCAA 1720		
TGAAAAATTA	TTGGATTGGG	AGTTGTGGGA	GTGAAGAGAT	GGGTCAAAAG	CCATCAATCT
1750 TGAATGCTTC			1780 TATGTTTACA	1790 ACACTGAAAA	1800 CAATCTATCC
1810 TAGAAATGTT			1840 TTCCGTATAT		
1870 CAGAATTCAA	1880 GAGTTGTTTG		1900 CTCTTTTTTG		1920 ACTCAGATTT
1930 TTACATTCAA			1960 GAAAAAGTGC		
1990 CAAGTTGGCG	2000 GCACTTTGGA		2020 GATGAAAAG		2040 GTTTGTCGGG
2050	2060 CCCTGGGTGG		2080 GCATTTTTGG		
2110	2120	2130	2140 TACATATGTA	2150	2160
2170	2180	2190	2200	2210	2220
			AGCTTGAATG		
2230 ATTGACATTT	2240 TATTCACTCA		2260 GACTCGGCAC		

Fig. 1 (cont'd)

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	3/23	,	
	2310 CTTTGTATTA		
	2370 ACACGACTTT		2400 AACACGTGTA
	2430 ACCGTCCATG		
	2490 ATTTTGTGAC		2520 AAGGGCATGT
	2550 TTCTTGTCTC		
	2610 TACGTGAATA		
	2670 AAGCTCTTCG		
	2730 GGGAAATAAG		
	2790 TATTCTCGAA		
	2850 TGTTTCAGAA		
	2910 CATCGTCTTA		
	2970 CAAACTTGCA		
	3030 TGGATGGAAG		
	3090 CATTATTCAA		
	3150 GTTACTTTCA		
3190 TTCAAGCCTA	3210 TATCTTACAA		
	3270 AGAACAACTG		
	3330 AAAAATCTTC		
	3390 AAAAAAAAGA		
	- • -	4	

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		1, 23			
				3470 GTAGAATTGG	
3490 TTACATTTCC		3510 ACAGCGTAAG		3530 GGCATAAGAG	3540 TTTTCTCACG
		3570 TTGGGTGTCA		3590 TCAAAAACAA	3600 TATCAGGAAA
				3650 CGGAACGACG	
3670 ATGAGAAATT	3680 CTCAGGTGTG		3700 TCGTGTAGAA	3710 CTAGAAGCAA	3720 CGGGTATGCA
				3770 ATGGAAATGG	
		3810 TACTGGAAGG		3830 CTATGATAGC	3840 ATTTATCAAT
3850 TATTAAAGAA	3860 CTCTGGAATT		3880 GTATAAATAA	3890 ATCTCTATTT	3900 CTTGCGACCT
		3930 GTTTTACAGA		3950 ATCGAAACGG	3960 GCCACCATCT
3970 CCATTAAACC				4010 CTCTGACTTT	
4030 AGTCTTACAT			4060 TTAAGCGTTC	4070 TATCTGATAA	4080 AGTTCTTCGG
				4130 TCTCACTAAC	
				4190 TTGAAGAGGT	
4210	4220	4230	4240	4250 TTTTGTATTT	4260
4270	4280	4290	4300	4310 AGAAGAAAAT	4320
4330	4340	4350	4360	4370 GTATGCTTTG	4380
4390	4400	4410	4420	4430	4440
4450	4460	4470	4480	4490	4500
4510	4520	4530	4540	ATATTTTGAA 4550	4560
ATTGTCAAAA	AGATTGAAAA	CTCCGAGTTT		GAAATTTTCA	CTTCAGCCCA

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				4610	
CACACACACA	CACACATTCA	CGAAACTTTG	TGTTGTTTAT	GTTACTTATA	TGTTATCTTT
4630	4640	4650	4660	4670	4680
				GGAAGTTATA	
ICIGICIONI	CHICCHILL		10101111111	00.11.01.11.11.1	101011000110
4690	4700	4710	4720	4730	4740
ATTGATTAAA	CCTGTGAGAG	ATGCCCATTT	GTACTCATTT	TACGACTGTC	TCATGTCCAA
				4790	
ACACCATGTT	TATTGTAATT	ACCAGGCTAC	TATTTGCAGA	TGCGATCAAC	ATCACCACCT
4810	4820	4830	4840	4850	4860
				TGGACAAATT	
4870	4880	4890	4900	4910	4920
GCTTTTCCAT	TGGCATTTAC	AATGTTTAAT	GTTAGTTAAT	CCACAGTTAA	AAATTCCCAT
4000	4040	4050	1060	4070	4000
				4970	
AATCATAAAT	ATCTCGACTT	TTCAGCTTGT	CTACTGGTGG	CACTATTTGT	CICAAACITI
4490	5000	5010	5020	5030	5040
				TCCAATAATT	
5050				5090	
GGTATCTACC	TCCATTCTTT	TCCGATGATT	CGCAGTTTTT	CACAGGGTTC	AAATGTATCT
E110	E120	E120	E140	F1F0	E160
5110	5120		5140	TTAATATTTA	5160
CGIICAAICI	IIIIAIGGII	ATTICICITE	AAIGICCAII	IIAAIAIIIA	INGANCACII
5170	5180	5190	5200	5210	5220
				AATTTATTTC	TAAATAACTG
				5270	
CGTTTCTGGG	GTTTCTATCA	GCACTTACTA	GCTGACAAAA	ACTTTTCCGT	ATTCGGAATT
5290	5300	5310	5320	5330	5340
				GTATTTATTC	
5350	5360	5370	5380	5390	5400
TTATATTGCT	CGCACCCTAA	ATGACAGGTA	TTAGAAATTA	ACCGCTTTTC	AGAGTATTTT
	- 400		-440	- 4 - 4	- 4 4 4
				5450	
TAATCTTCTT	AGTACTAGTT	TAGTTCTTTA	AATAAGAAAC	CATCTAGTTT	ITCATTATCA
5470	5480	5490	5500	5510	5520
				AAAAAATTT	
				-	
	5540				
ACAAATTATG	TCTTCTCATT	TTTGATCGCT			

Fig. 1 (cont'd)

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		6/23		
10 ATGAAGTTTA	20 TTCCTGAAAT	30 CACACTACTC	40 TTGCTTTTAT	50 TTGTACACTC
60 TACACAGGCT		80 GACGGAAATG	90 TCCGGAGGGT	100 GCGTGGTCGG
110 AAGGAAAGAT		130 ATCATGAGCA		
160 GACGCGGAGG		180 AGTTAATATT		200 TACAGGATAT
210 GGGAAGCTTG		230 CATCCGACTT		
260 CTCAACTGTG	270 GCATGACTCG	280 GCACTTTCTT	290 TTGCTCATCT	300 TCCGGCTTGT
310 AAGCGAAATA		330 AACACGACTT		
360 AAACACGTGT		380 CAAAACGAAC		
410	420	430 CTGTACGAGA	440	450
460	470	480 ACCTTGCAAT	490	500
510	520	530 TATTAATCTT	540	550
560	570	580 TGGATGGAAG	590	600
610	620	630 TGATATGGTT	640	650
660	670	680	690	700
710	720	GGTACTGGGA 730	740	750
CTTTCAAACG 760		TTCTATATTA 780		
TATCTTACAA 810	TCATTGTATC	TTGGGTTTCA 830	TTCTGCATGG	AACCAAAAGC
	AGAACAACTG	TCGGAATCTC	ATCTCTTCTA	GCTCTTACTT
TCCAGTTTGG	AAATATTTTG	AAAAATCTTC	CAAGGGTTTC	ATATGTGAAA
		930 TGGATGCATA		

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960 GGTAGAATTG		980 GTTACATTTC	
1010 GAAACGCGGA		1030 GAACGAATGA	1050 GGTGTGGGCA
1060 AACGGATCGT		1080 AAGCAACGGG	1100 GGGGATCTGT
1110 AATCTCACAT		1130 CAAGCAATGG	1150 AATAATCGAC
1160 ATGATACACC		1180 GGAAGAGGAT	1200 AAACGGGCCA
1210 CCATCTCCAT		1230 AATGACTACA	1250 AGATCCCTCT
1260 GACTTTTGAT		1280 TTTCCATGGA	1300 CCCCTGATTG
1310 AAGAGATGCG		1330 CCACCTCCAC	1350 TCTGGCCAGA
1360 TTCCATCCGG		1380 CAAATTCTCC	
1410 ATTTACAATG		1430 TCTACTGGTG	1450 TCTCAAACTT
	1470 CTATCAGTGA		

Fig. 2 (cont'd)

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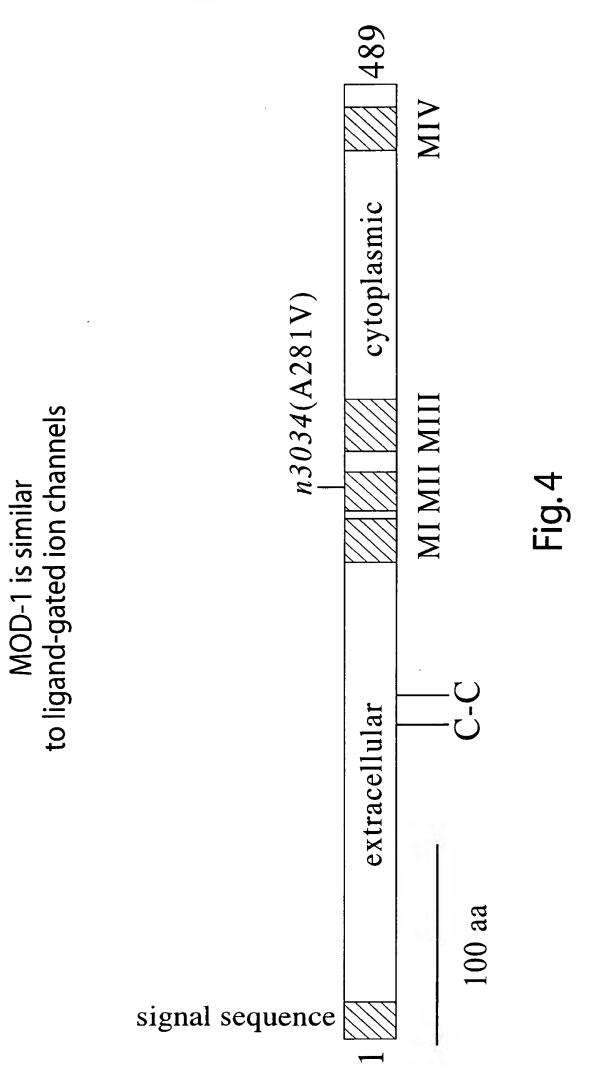
10	20	30	40	50
MKFIPEITLL			AWSEGKIMNT	IMSNYTKMLP
60	70	80	90	100
			ILFTQLWHDS	
110	120	130	140	150
			ASPSENVMVI	
160	170	180	190	200
HRLSVKSPCN			SHNSEEVELH	
210	220	230	240	250
PIQLPDFDMV	HYSTKKETLL	YPNGYWDQLQ	VTFTFKRRYG	FYIIQAYVPT
260	270	280	290	300
YLTIIVSWVS	FCMEPKALPA	RTTVGISSLL	ALTFQFGNIL	
310	320	330	340	350
AMDVWMLGCI			NSVRNAERRR	
360	370	380	390	400
			NNRHDTPQVT	
410	420	430	440	450
			PLIEEMRSTS	
460	470	480		
	IVAFPLAFTM		SQTFDQNYQ	

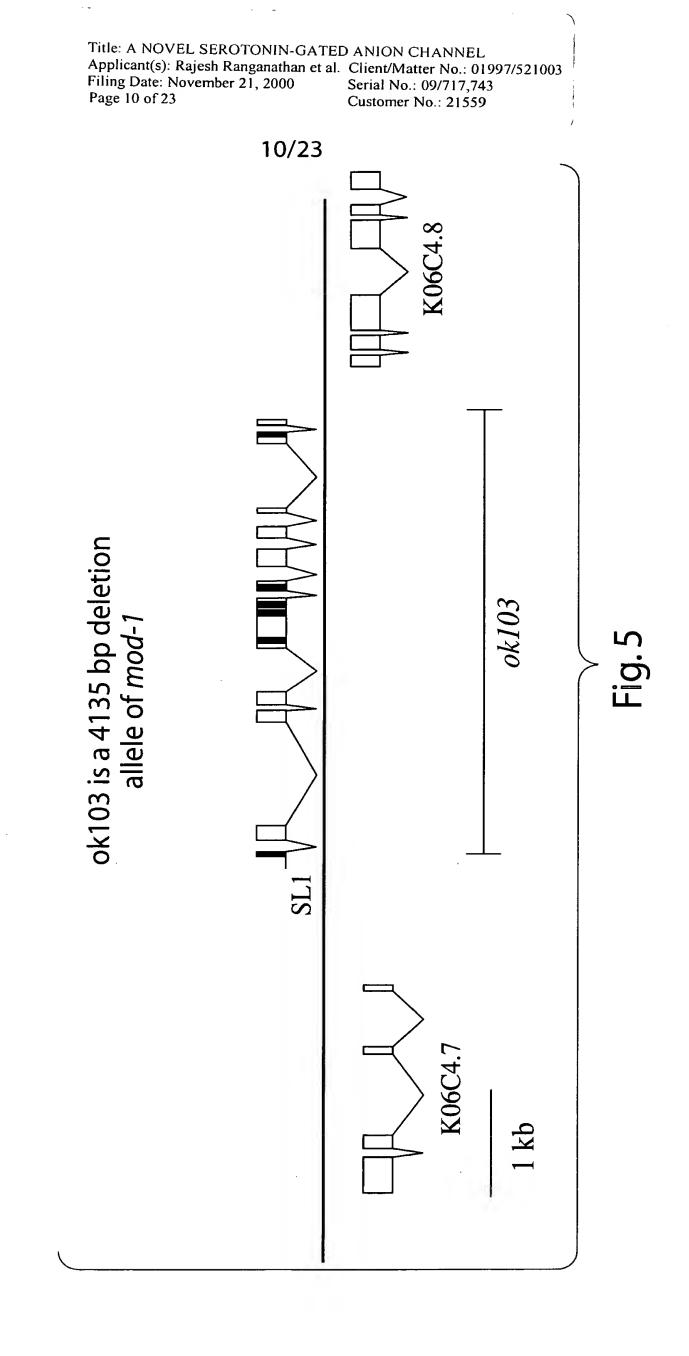
Fig. 3

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10 TCATGTTTCA	20 CGGAACGACG	30 AATTTATCCC	40 GTCGTTTCTT	50 CCTTTCCGTT	60 TTAACTCATA	
70 TCTCTTCCTG			100 AATTCCTCAC	110 GTTTTTTTT	120 GTTTTTTCGT	
130 CGTTTAATTG				170 GCATCAGAAA		
190 CTCCGTGTCC				230 ACATCGCAAG		
250 CTGCCAATGG				290 GGTGCTCTTT		
310 TTCTCTTGTG				350 CAATGAACAT		
370 ATCCGTCTGG				410 TTCATACTTT		
430	440	450	460	470 TTTGGTCGCG	480	
490	500	510	520	530 GACTGATTTC	540	
550	560	570	580	590	600	
CAAAGAATAT	ATTCCCTCTC	GAGCAAGAGA	AAATTCCAGA	AAATAGTAGT	TTTTTTCAAT	
				650 TGGCTTTAAA		
				710 GTGTTCGTTT		
				770 GGCAAGCTCC		
				830 CTGAATCTGT		
				890 TTCAGAAATC		
910 AGGTGCCAAT	920 GCGGTGAAAG	930 AAAATTATGA	940 AGTTTATTCC	950 TGAAATCACA	960 CTACTCTTGC	
970	980	990	1000	1010 GTCCATTTTA	1020	
1030	1040	1050	1060	1070 ACAATGAAAT	1080	
1090	1100	1110	1120	1130 GACAAAAACT	1140	

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1150	1160	1170	1180	1190	1200
CGGAATTAGA	TTTTTATGCA	AGCAATGTTT	CATTTTTACA	CAGTATAGTA	TTTATTCTTA
1210	1220	1230	1240	1250	1260
CTTTTGATTA	TATTGCTCGC	ACCCTAAATG	ACAGGTATTA	GAAATTAACC	GCTTTTCAGA
1270	1280	1290	1300	1310	1320
GTATTTTAA	TCTTCTTAGT	ACTAGTTTAG	TTCTTTAAAT	AAGAAACCAT	CTAGTTTTTC
1330	1340	1350	1360	1370	1380
ATTATCACTC	AACTTCAGTC	GGACAAATTT	TAAATTTTTT	ACTCGATAAA	AAAATTTTAT
1390	1400	1410			
AATTCAGACA	AATTATGTCT	TCTCATTTTT	GATCGCT		

Fig. 6 (cont'd)

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			13/23		
60 TTAACTCATA					10 TCATGTTTCA
120 GTTTTTTCGT	110 GTTTTTTTT		90 AGCTCTTGTC	80 GATCCTTCAG	70 TCTCTTCCTG
180 ACTTTCTGCT			150 TATCCGTCCT		130 CGTTTAATTG
240 CAACAACTAA	230 ACATCGCAAG				190 CTCCGTGTCC
300 TCAGAAGGTT			270 TTGGAGCAGG		250 CTGCCAATGG
360 GTGTGAGTTC	350 CAATGAACAT		330 TTTTTGAGGC		310 TTCTCTTGTG
420 CCAAATTTTT					370 ATCCGTCTGG
480 TGATCAACGG					
540 GGGGTTTTT	530 GACTGATTTC		510 AATGTTTTTG	500 TTTGAAACAA	490 ATCCTACTTT
600 TTTTTTCAAT			570 GAGCAAGAGA		550 CAAAGAATAT
660 ACATGTGTTG			630 GCTAAAAAAC		
720 CATTTTCTCA			690 ACTAGTGTTT		
780 CGAATATTTT			750 TTCTGTGAAC		
			810 TATTTTCTCG		
			870 TATTCTATCA		
			930 AAAATTATGA		910 AGGTGCCAAT
			990 CAGGTTAGTT		
			1050 ATTGTTTTTG		
	1130	1120	1110	1100	1090
					

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			1-7/2		
1200 AGCGTACAAG	1190 CGCGGAGGAC	1180 TGTTGCCCGA			1150 TGAACACGAT
	1250 TTGCACACCA	1240 GACTCTATAA			1210 TTAATATTGA
	1310 AAGTTTATCA	1300 ACTTTTGAAT		1280 AAATTAAACT	1270 GTTTTCTTTA
	1370 GTTCCAAATT	1360 CTTCAAAGCG			1330 GTCTGAACTT
1440 CGTTCTTTTT	1430 CTTCATTTAA	1420 AAGCCTTTTT			1390 ATTTATCTCT
1500 CTGAGAATAG	1490 ACTGCTTGAA	1480 TCCTTGATGA			1450 TATGTCGTTG
1560 GTTTTGCACT	1550 CCAGAAGGCA	1540 AGTTTTGTGC			1510 TCACATGAGG
	1610 TGAGTGGAAA	1600 ACACAGAAGA			1570 GAACTTGTTC
1680 CGAAGTTATG	1670 ATGAATTCTG	1660 TTTGTTGCAA			1630 GACTGCCAAA
	1730 GGGTCAAAAG			1700 TTGGATTGGG	1690 TGAAAAATTA
1800 CAATCTATCC	1790 ACACTGAAAA		1770 TTGTTTCTCA	1760 GGTCAAAGAT	1750 TGAATGCTTC
	1850 TTTTTCATCT	1840 TTCCGTATAT			1810 TAGAAATGTT
1920 ACTCAGATTT	1910 GAGAATATGT		1890 AAATAACTTC	1880 GAGTTGTTTG	1870 CAGAATTCAA
	1970 CAAGTACCAG		1950 TTTTCAAATA		1930 TTACATTCAA
	2030 TGTTTGATAA	2020 GATGAAAAAG	2010 GAGTGAATTT	2000 GCACTTTGGA	1990 CAAGTTGGCG
2100 ATAGTCGAAG	2090 AAACATTTTC		2070 GGAAATGGTG	2060 CCCTGGGTGG	2050 CAAACTGGTC
2160 GAATTGAACA	2150 TATGAAAATA		2130 AAAATAGAGA	2120 AGAAAATTGG	2110 AAGTGGAACA
2220 CGACTTTGAA	2210 AAATATCATC	2200 AGCTTGAATG	2190 GGATATGGGA	2180 TTTATTTTCA	2170 GGAACTTATT
	2270 TTTCTTTTGC	GACTCGGCAC		2240 TATTCACTCA	2230 ATTGACATTT
		7 / ./.	Fi~		

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15/23							
				2330 ATATTTAAAT			
2350 TCAGAAATAT			2380 TACCTAAGAT	2390 TTGGTCTCCA	2400 AACACGTGTA		
2410 TGATTAATTC				2450 GGAAAATGTG			
2470 TGTACGAGGT		2490 ATTTTGTGAC		2510 GAGCATGTCT	2520 AAGGGCATGT		
2530 TGTAGCAAGA				2570 TCCTAAGTAT			
		2610 TACGTGAATA		2630 TAACTGGGTG	2640 AAGGATAAAA		
2650 TAGAGAAGGA		2670 AAGCTCTTCG		2690 GAGTCTAGAA	2700 TCGACATATG		
2710 TATTCATGTT				2750 GAAAAAGAGT			
2770 TTTTTAGAAA				2810 TCTAATGGTT			
				2870 AAAATTTGAA			
				2930 ACCTTGCAAT			
2950 GACAGTTTCC				2990 TGAATCCTAT			
				3050 ATTAATGAAG			
3070 TTCCTGACTT				3110 AACTTTACTC			
				3170 ACGATATGGA			
		3210 TATCTTACAA		3230 TTGGGTTTCA	3240 TTCTGCATGG		
3250 AACCAAAAGC				3290 ATCTCTTCTA			
				3350 ATATGTGAAA			
				3410 TTTGTTTCAG			
Fig. 7 (cont'd)							

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				3470 GTAGAATTGG	
3490 TTACATTTCC	3500 CGTTGTCAGA			3530 GGCATAAGAG	
3550 TGGAGGGAAG		3570 TTGGGTGTCA		3590 TCAAAAACAA	3600 TATCAGGAAA
3610 TTGAATTTCA		3630 GTAGTAAACA		3650 CGGAACGACG	3660 ACGGGAACGA
3670 ATGAGAAATT	3680 CTCAGGTGTG		3700 TCGTGTAGAA	3710 CTAGAAGCAA	3720 CGGGTATGCA
3730 AACGGGGGAT				3770 ATGGAAATGG	
3790 CGACATGATA	3800 CACCTCAAGT		3820 TTAGCAATCT	3830 CTATGATAGC	
3850 TATTAAAGAA		3870 AGTTTTTAAA		3890 ATCTCTATTT	
3910 ACATTGAACT	3920 TAATAGTTAT		3940 GGATCACTTC	3950 ATCGAAACGG	3960 GCCACCATCT
3970 CCATTAAACC				4010 CTCTGACTTT	
				4070 TATCTGATAA	
				4130 TCTCACTAAC	
				4190 TTGAAGAGGT	
				4250 TTTTGTATTT	
				4310 AGAAGAAAAT	
				4370 GTATGCTTTG	
				4430 TTATCAAAAC	
				4490 ATATTTTGAA	
		CTCCGAGTTT	CTATATATGC	4550 GAAATTTTCA	
			7 (cont'd	1	

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				4610 GTTACTTATA	
				4670	
TCTGTCTGAT	CATGGTTTTC	GGACTGAAAT	TGTGTTAATC	GGAAGTTATA	TGTGAGCCAC
4690				4730	
ATTGATTAAA	CCTGTGAGAG	ATGCCCATTT	GTACTCATTT	TACGACTGTC	TCATGTCCAA
4750				4790	
ACACCATGTT	TATTGTAATT	ACCAGGCTAC	TATTTGCAGA	TGCGATCAAC	ATCACCACCT
				4850	
CCACCATCTG	GATGTCTGGC	CAGATTCCAT	CCGGAAGCAG	TGGACAAATT	CTCCATTGTA
4870				4910	
GCTTTTCCAT	TGGCATTTAC	AATGTTTAAT	GTTAGTTAAT	CCACAGTTAA	AAATTCCCAT
				4970	
AATCATAAAT	ATCTCGACTT	TTCAGCTTGT	CTACTGGTGG	CACTATTTGT	CTCAAACTTT
4990	5000	5010	5020	5030	5040
CGATCAAAAC	TATCAGTGAT	TGAAGTTTAT	CCCTTTTAAT	TCCAATAATT	CACAGTTGCC
5050	5060	5070	5080	5090	5100
GGTATCTACC	TCCATTCTTT	TCCGATGATT	CGCAGTTTTT	CACAGGGTTC	AAATGTATCT
5110	5120	5130	5140	5150	5160
CGTTCAATCT				TTAATATTTA	TAGAACACTT
5170				5210	5220
TTATGTACAT	TGTGTTGGTA	TTCAATTCGA	AAAACAATGA	AATTTATTTC	TAAATAACTG
5230	5240	5250	5260	5270	5280
CGTTTCTGGG	GTTTCTATCA	GCACTTACTA	GCTGACAAAA	ACTTTTCCGT	ATTCGGAATT
5290	5300	5310	5320	5330	5340
AGATTTTAT	GCAAGCAATG	TTTCATTTTT	ACACAGTATA	GTATTTATTC	TTACTTTTGA
5350	5360	5370	5380	5390	5400
TTATATTGCT	CGCACCCTAA	ATGACAGGTA	TTAGAAATTA	ACCGCTTTTC	AGAGTATTTT
5410	5420	5430	5440	5450	5460
TAATCTTCTT	AGTACTAGTT	TAGTTCTTTA	AATAAGAAAC	CATCTAGTTT	TTCATTATCA
				5510	
CTCAACTTCA	GTCGGACAAA	TTTTAAATTT	TTTACTCGAT	AAAAAATTT	TATAATTCAG
5530	5540	5550			
ACAAATTATG	TCTTCTCATT	TTTGATCGCT			

Fig. 7 (cont'd)

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10/23						
10 ATGAAGTTTA	20 TTCCTGAAAT	30 CACACTACTC	40 TTGCTTTAT	50 TTGTACACTC	60 TACACAGGCT	
70 AAAGGAAAAC		90 TCCGGAGGGT		110 AAGGAAAGAT	120 TATGAACACG	
130 ATCATGAGCA		150 AATGTTGCCC				
		210 GGGAAGCTTG		230 CATCCGACTT		
250 ATTTTATTCA		270 GCATGACTCG				
310 AAGCGAAATA	320 TCACAATGGA	330 AACACGACTT			360 AAACACGTGT	
370 ATGATTAATT		390 AACCGTCCAT				
		450 CTGGATTAAC				
490 TTGGATCTGC		510 TTTCGATACT		530 TATTAATCTT		
		570 TGAACTTCAT				
		630 TGATATGGTT				
		690 TCAGCTTCAA				
		750 TGTTCCAACA				
		810 TCTGCCGGCA				
850 GTTCTTACTT	860 TCCAGTTTGG	870 AAATATTTTG	880 AAAAATCTTC	890 CAAGGGTTTC	900 ATATGTGAAA	
		930 TGGATGCATA				
		990 CCGTTGTCAG				
		1050 GGTGTGGGCA				
		1110 AATCTCACAT				

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1150	1160	1170	1180	1190	1200
AATAATCGAC	ATGATACACC	TCAAGTTACT	GGAAGAGGAT	CACTTCATCG	AAACGGGCCA
1210	1220	1230	1240	1250	1260
CCATCTCCAT	TAAACCTTCA	AATGACTACA	TTTGATTCGG	AGATCCCTCT	GACTTTTGAT
1270	1280	1290	1300	1310	1320
CAGCTGCCAG	TTTCCATGGA	ATCCGATAGA	CCCCTGATTG	AAGAGATGCG	ATCAACATCA
1330	1340	1350	1360	1370	1380
CCACCTCCAC	CATCTGGATG	TCTGGCCAGA	TTCCATCCGG	AAGCAGTGGA	CAAATTCTCC
1390	1400	1410	1420	1430	1440
ATTGTAGCTT	TTCCATTGGC	ATTTACAATG	TTTAATCTTG	TCTACTGGTG	GCACTATTTG
1450	1460	1470			
TCTCAAACTT	TCGATCAAAA	CTATCAGTGA			

Fig. 8 (cont'd)

Title: A NOVEL SEROTONIN-GATED ANION CHANNEL Applicant(s): Rajesh Ranganathan et al. Client/Matter No.: 01997/521003 Filing Date: November 21, 2000 Serial No.: 09/717,743 Page 20 of 23 Customer No.: 21559 20/23 The Mod-1 Channel is Activated by Serotonin MOD-1 injected 1 μM 5-HT Fig. 9A 1 mM GABA uninjected 1 μM 5-HT 10 sec Data: Global_mean Model: Hill $CI_N^2 = 0.00234$ kmax 1.29923 ±0.03076 ±0.00507 kd 0.03211 1.04613 ±0.13373 n 1E-3 0.01 0.1 100 10 Fig. 9B [5-HT], μM GABA Ach Gly 5-HT Q-107 (5-HT₃ agonist)

1.6 -

1.4

1.2

1.0

8.0

0.6

0.4

0.2

0.0

3.0

2.5

2.0

1.5

1.0

0.5

0.0

-0.5

- 1000 μM *-*

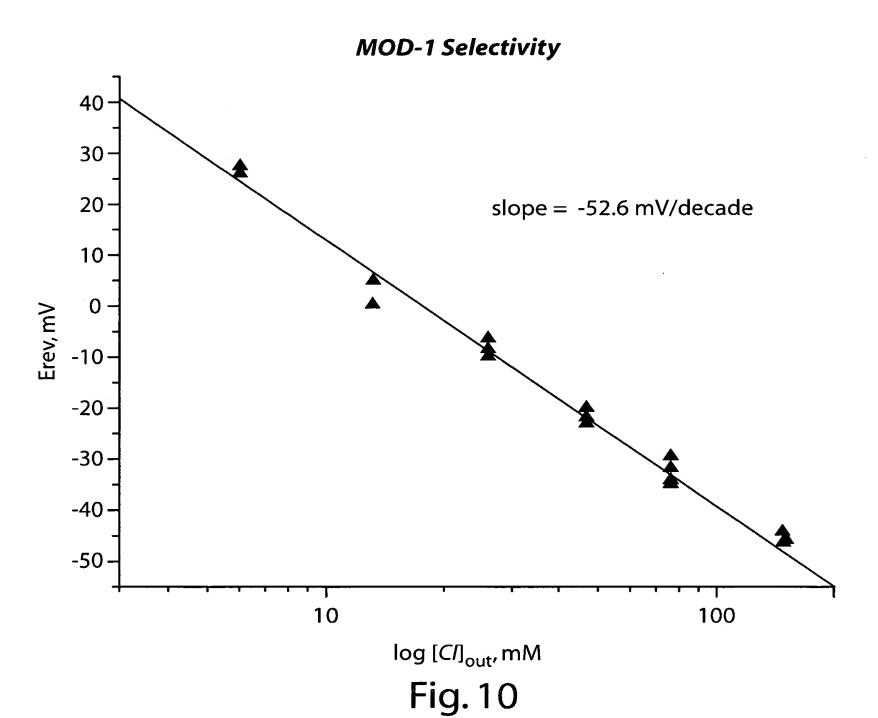
Peak Current, μA

Relative Peak Current

Fig. 9C

 $1 \mu M$

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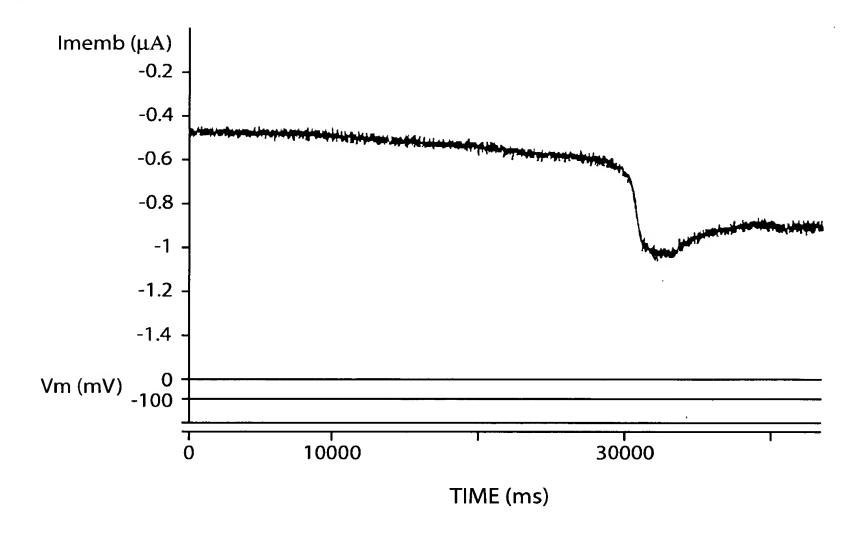
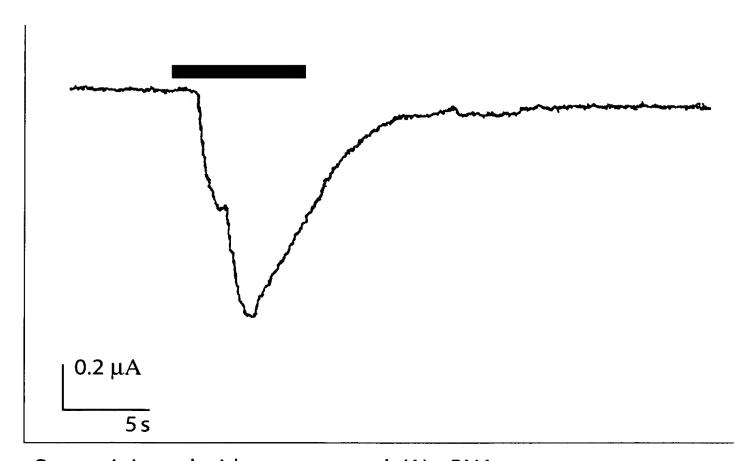


Fig. 11

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Oocyte injected with rat cortex poly(A)+ RNA. Membrane potential -70 mV. 1 μ M 5-HT applied (bar) Oocyte was pretreated with 0.2 mM BAPTA-AM for 2 hours. The bath solution contained 2 mM Co²⁺ to block 5-HT3a responses.

Fig. 12